

WHAT IS CLAIMED IS:

- 1 1. A computer implemented method for establishing a Virtual Private
2 Network (VPN) communication tunnel between a client computer and a
3 server-side system, comprising:
4 receiving a request to establish a VPN session with a server-
5 side system from at least one client computer out of a plurality of client
6 computers coupled to a modem within a client-side system, where said
7 request contains login details for a user of said at least one client
8 computer;
9 determining a network address of said at least one client
10 computer;
11 authenticating said user based on said user login details; and
12 establishing a VPN tunnel between said at least one client
13 computer having said network address and said server-side system,
14 where said VPN tunnel is established over said modem.
- 1 2. The computer implemented method of claim 1, wherein said receiving
2 further comprises obtaining security details from said client.
- 1 3. The computer implemented method of claim 1, wherein said
2 determining further comprises reading a connection log to extract the network
3 address of said at least one client computer.
- 1 4. The computer implemented method of claim 1, further comprising the
2 step, after said determining step, of storing said network address.
- 1 5. The computer implemented method of claim 1, wherein said
2 authenticating further comprises the steps of:
3 transmitting said login details to an authentication server for
4 authentication; and
5 accepting an authentication response from said server.

1 6. The computer implemented method of claim 5, wherein said
2 transmitting further comprises sending said login details to a Radius server.

1 7. The computer implemented method of claim 1, wherein said
2 authenticating step further comprises the steps of:
3 transmitting said login details to an authentication server for
4 authentication;
5 accepting a challenge from said server; and
6 re-transmitting said login details to said authentication server for
7 authentication.

1 8. The computer implemented method of claim 1, wherein said
2 determining further comprises ascertaining an Internet Protocol (IP) address
3 of said client.

1 9. The computer implemented method of claim 1, wherein said
2 determining further comprises ascertaining a Media Access Control (MAC)
3 address of said client.

1 10. The computer implemented method of claim 1, further comprising:
2 receiving a new request to establish a new VPN session with a
3 different server-side system from a different client computer out of said
4 plurality of client computers coupled to said modem within said client-
5 side system, where said request contains new login details for a new
6 user of said different client computer;
7 determining a new network address of said different client
8 computer;
9 authenticating said new user based on said new user login
10 details; and

11 establishing a new VPN tunnel between said different client
12 computer having said new network address and said new server-side
13 system, where said VPN tunnel is established over said modem.

1 11. The computer implemented method of claim 1, further comprising:
2 receiving a new request to establish a new VPN session with
3 said server-side system from a different client computer out of said
4 plurality of client computers coupled to said modem within said client-
5 side system, where said request contains new login details for a new
6 user of said different client computer;
7 determining a new network address of said different client
8 computer;
9 authenticating said new user based on said new user login
10 details; and
11 establishing a new VPN tunnel between said different client
12 computer having said new network address and said new server-side
13 system, where said VPN tunnel is established over said modem.

1 12. The computer implemented method of claim 1, further comprising
2 severing the VPN tunnel after a predetermined time of inactivity.

1 13. A computer program product for use in conjunction with a computer
2 system for establishing a Virtual Private Network (VPN) communication tunnel
3 between a client computer and a server-side system, the computer program
4 product comprising a computer readable storage and a computer program
5 embedded therein, the computer program comprising:
6 instructions for receiving a request to establish a VPN session
7 with a server-side system from at least one client computer out of a
8 plurality of client computers coupled to a modem within a client-side
9 system, where said request contains login details for a user of said at
10 least one client computer;

11 instructions for determining a network address of said at least
12 one client computer;
13 instructions for authenticating said user based on said user login
14 details; and
15 instructions for establishing a VPN tunnel between said at least
16 one client computer having said network address and said server-side
17 system, where said VPN tunnel is established over said modem.

1 14. The computer program product of claim 13, wherein said instructions
2 for determining further comprise instructions for reading a connection log to
3 extract the network address of said at least one client computer.

1 15. The computer program product of claim 13, wherein said computer
2 program further comprises instructions for storing said network address.

1 16. The computer program product of claim 13, wherein said instructions
2 for authenticating further comprise:

3 instructions for transmitting said login details to an
4 authentication server for authentication; and
5 instructions for accepting an authentication response from said
6 server.

1 17. The computer program product of claim 13, wherein said instructions
2 for transmitting further comprise instructions for sending said login details to a
3 Radius server.

1 18. The computer program product of claim 13, wherein said instructions
2 for authenticating further comprise:

3 instructions for transmitting said login details to an
4 authentication server for authentication;
5 instructions for accepting a challenge from said server; and

6 instructions for re-transmitting said login details to said
7 authentication server for authentication.

1 19. The computer program product of claim 13, wherein said instructions
2 for determining further comprise instructions for ascertaining an Internet
3 Protocol (IP) address of said client.

1 20. The computer program product of claim 13, wherein said instructions
2 for determining further comprise instructions for ascertaining a Media Access
3 Control (MAC) address of said client.

1 21. The computer program product of claim 13, wherein said computer
2 program further comprises:
3 instructions for receiving a new request to establish a new VPN
4 session with a different server-side system from a different client
5 computer out of said plurality of client computers coupled to said
6 modem within said client-side system, where said request contains
7 new login details for a new user of said different client computer;
8 instructions for determining a new network address of said
9 different client computer;
10 instructions for authenticating said new user based on said new
11 user login details; and
12 instructions for establishing a new VPN tunnel between said
13 different client computer having said new network address and said
14 new server-side system, where said VPN tunnel is established over
15 said modem.

1 22. The computer program product of claim 13, wherein said computer
2 program further comprises:
3 instructions for receiving a new request to establish a new VPN
4 session with said server-side system from a different client computer
5 out of said plurality of client computers coupled to said modem within

6 said client-side system, where said request contains new login details
7 for a new user of said different client computer;
8 instructions for determining a new network address of said
9 different client computer;
10 instructions for authenticating said new user based on said new
11 user login details; and
12 instructions for establishing a new VPN tunnel between said
13 different client computer having said new network address and said
14 new server-side system, where said VPN tunnel is established over
15 said modem.

1 23. The computer program product of claim 13, wherein said computer
2 program further comprises instructions for severing the VPN tunnel after a
3 predetermined time of inactivity.